

C L A I M S

1. A signal generator having a license management function, comprising:

5 a signal creating and supplying unit which creates a test signal to be transmitted to a measurement object; and

a license management unit which manages a license of waveform data used in creating the test signal by the signal creating and supplying unit, characterized
10 in that

the license management unit comprises:

a waveform data memory which stores a plurality of waveform data files into which a plurality of waveform data for various tests is written;

15 a usable file list taking unit which takes a usable file list for specifying a usable waveform data file authenticated for the signal generator, the usable file list being input from an outside section;

a usable file list memory which stores the usable
20 file list taken by the usable file list taking unit;

a utilization file specifying unit which specifies a desired waveform data file from the plurality of waveform data files stored in the waveform data memory;

a determining unit which determines whether or
25 not the desired waveform data file specified by the utilization file specifying unit is included in the usable file list stored in the usable file list memory;

and

a waveform data file reading and transferring unit which reads a specified waveform data file from the waveform data memory and transfers the file to the signal creating and supplying unit when the determining unit determines that the desired waveform data file is included in the usable file list memory, and wherein

the signal creating and supplying unit creates a predetermined test signal according to the waveform data read from the specified waveform data file transferred by waveform data file reading and transferring unit and transmits the predetermined test signal to the measurement object.

2. The signal generator having the license management function according to claim 1, characterized in that

the plurality of waveform data files stored in the waveform data memory each has a version,

a usable version is registered in the usable file list stored into the usable file list memory according to the usable waveform data file authenticated for the signal generator, and

when the version of the specified waveform data file specified by the utilization file specifying unit is equal to or smaller than the usable version for the same waveform data file registered in the usable file list, the determining unit determines that the

specified waveform data file is included in the usable file list stored in the usable file list memory.

3. The signal generator having the license management function according to claim 1, characterized
5 in that

the usable file list taken by the usable file list taking unit has been encoded previously with inherent information in the signal generator, and

the signal generator further comprises a decoding
10 unit which decodes an encoded usable file list by using the inherent information in the signal generator and writes a decoded usable file list in the usable file list memory.

4. The signal generator having the license
15 management function according to claim 3, characterized in that

when the inherent information in the signal generator is a manufacture serial number of the signal generator,

20 the signal generator further comprises a manufacture serial number memory which stores the manufacture serial number of the signal generator, and the decoding unit decodes the encoded usable file list by using the manufacture serial number of the signal generator read
25 from the manufacture serial number memory.

5. The signal generator having the license management function according to claim 1, characterized

in that

the encoded usable file list is downloaded into the signal generator from a site of a manufacture maker of signal generators with charge through a network.

5 6. The signal generator having the license management function according to claim 1, characterized in that

the encoded usable file list is downloaded into the signal generator through a storage medium provided
10 by a manufacture maker of signal generators with charge.

7. The signal generator having the license management function according to claim 1, characterized in that

15 the waveform data file stored in the waveform data memory is downloaded from a site of a manufacture maker of signal generators through a network without charge.

8. The signal generator having the license management function according to claim 1, characterized
20 by further comprising:

a detail display unit which displays detailed information of the waveform data read from the waveform data file transferred by the waveform data file reading and transferring unit.

25 9. The signal generator having the license management function according to claim 1, characterized by further comprising:

a list display instructing unit for instructing
a list display of titles of the waveform data files
stored in the waveform data memory; and

5 a list display unit which displays a list of the
titles of the waveform data files stored in the waveform
data memory, in response to an instruction by the list
display instructing unit.

10 10. The signal generator having the license
management function according to claim 1, characterized
in that

at least one of a W-CDMA transmission test data
package and a GSM transmission test data package is
included in the waveform data files stored in the
waveform data memory.

15 11. A license management method of a signal
generator, comprising:

a step for preparing a signal creating and
supplying unit which creates a test signal to be
transmitted to a measurement object; and

20 a step for managing a license of waveform data
used in creating the test signal by the signal creating
and supplying unit, characterized in that

the managing step comprises:

25 a step for storing in a waveform data memory a
plurality of waveform data files into which a plurality
of waveform data for various tests is written;

a step for taking a usable file list which

specifies a usable waveform data file authenticated for the signal generator;

a step for storing the usable file list taken by the taking step in a usable file list memory;

5 a step for specifying a desired waveform data file from the plurality of waveform data files stored in the waveform data memory;

a step for determining whether or not the desired waveform data file specified by the specifying step is included in the usable file list stored in the usable file list memory; and

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a step for reading a specified waveform data file specified by the specifying step from the waveform data memory and transferring the specified waveform data file to the signal creating and supplying unit when it is determined that the desired waveform data file is included in the usable file list memory in the determining step, and wherein

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the signal creating and supplying unit creates a predetermined test signal according to the waveform data read from the waveform data file transferred by the transferring step and transmits the predetermined signal to the test measurement object.

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12. The license management method of the signal generator according to claim 11, characterized in that

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the plurality of waveform data files stored in the waveform data memory each has a version,

a usable version is registered in the usable file list stored in the usable file list memory according to the usable waveform data file authenticated for the signal generator, and

5 when the version of the specified waveform data file specified by the specifying step is equal to or smaller than the usable version for the same waveform data file registered by the usable file list, it is determined in the determining step that the specified
10 waveform data file is included in the usable file list stored in the usable file list memory.

13. The license management method of the signal generator according to claim 11, characterized in that
the usable file list taken by the taking step has
15 been encoded previously with inherent information in the signal generator, and

the license management method of the signal generator further comprises a step for decoding an encoded usable file list with the inherent information
20 in the signal generator and writing a decoded usable file list in the usable file list memory.

14. The license management method of the signal generator according to claim 13, characterized in that
when the inherent information in the signal
25 generator is a manufacture serial number of the signal generator,

the license management method of the signal

generator further comprises a step for storing the manufacture serial number of the signal generator in the manufacture serial number memory, and

5 in the decoding step, the encoded usable file list is decoded by using the manufacture serial number of the signal generator read from the manufacture serial number memory.

15 15. The license management method of the signal generator according to claim 11, characterized in that the encoded usable file list is downloaded into the signal generator from a site of a manufacture maker of signal generators with charge through a network.

15 16. The license management method of the signal generator according to claim 11, characterized in that the encoded usable file list is downloaded into the signal generator through a storage medium provided by a manufacture maker of signal generators with charge.

20 17. The license management method of the signal generator according to claim 11, characterized in that the waveform data file stored in the waveform data memory is downloaded from a site of a manufacture maker of signal generators through a network without charge.

25 18. The license management method of the signal generator according to claim 11, characterized by further comprising:

a step for displaying detailed information of the

waveform data read from the waveform data file.

19. The license management method of the signal generator according to claim 11, characterized by further comprising:

5 a step for instructing a list display of titles of the waveform data files stored in the waveform data memory; and

10 a step for displaying a list of the tiles of the waveform data files stored in the waveform data memory, in response to an instruction of the list display.

20. The license management method of the signal generator according to claim 11, characterized in that

15 at least one of a W-CDMA transmission test data package and a GSM transmission test data package is included in the waveform data files stored in the waveform data memory.